

Title (en)

THERMOPLASTIC POLYVINYL BUTYRAL COMPOSITIONS CONTAINING A LUBRICATING AGENT

Publication

EP 0174480 B1 19900516 (DE)

Application

EP 85109569 A 19850730

Priority

DE 3429441 A 19840810

Abstract (en)

1. A process for the preparation of thermoplastic plasticized polyvinyl butyral molding compositions by acetalization of polyvinyl alcohol with n-butylaldehyde in aqueous phase in the presence of an acid catalyst and, if appropriate, an organic sulfonic acid having an emulsifying action, and aftertreatment of the polyvinyl butyral under acetalization conditions at an elevated temperature in the presence of a compound having an emulsifying action, isolation an/or purification of the polyvinyl butyral and, if appropriate, admixture of conventional additives and mixing of the product, which may have been dried, with up to 40% by weight of plasticizer, relative to the polymer/plasticizer mixture, and molding, which comprises using a polyvinyl alcohol, which contains less than 1% by weight of vinyl acetate units and is capable of association, in the associated state in aqueous flowable solution for the acetalization and performing the acetalization in the presence of 0.1 to 5% by weight, relative to the aqueous phase, of a mineral acid, initially at a temperature below 20 degrees C and later at a temperature from 20 to 70 degrees C, performing the subsequent aftertreatment of the polyvinyl butyral in the presence of an organic sulfonic acid having 8 to 30 carbon atoms and having an emulsifying action, or one of its salts, at 50 to 70 degrees C for 0.5 to 10 hours, and employing as the plasticizer a) an ester of phthalic acid with a linear or branched C₆-C₁₀-alcohol or mixtures of these alcohols and/or b) an ester of adipic acid with a linear or branched C₆-C₁₀-alcohol or mixtures of these alcohols in a total quantity of 20 to 40% by weight, relative to the mixture.

IPC 1-7

C08F 8/28

IPC 8 full level

C08F 8/00 (2006.01); **B32B 17/10** (2006.01); **C08F 8/28** (2006.01); **C08L 29/00** (2006.01); **C08L 29/14** (2006.01)

CPC (source: EP US)

B32B 17/10605 (2013.01 - EP US); **B32B 17/10761** (2013.01 - EP US); **C08F 8/48** (2013.01 - EP US)

Cited by

EP0402213A1; FR2648139A1; AU2003257166B2; EP0287416A1; FR2613370A1; WO2004013191A1; WO9711976A1; US8053504B1; US8329793B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0174480 A2 19860319; **EP 0174480 A3 19870204**; **EP 0174480 B1 19900516**; CS 274264 B2 19910411; CS 578185 A2 19900912; DE 3429441 A1 19860220; DE 3577713 D1 19900621; JP S6181450 A 19860425; MX 164161 B 19920720; US 4970253 A 19901113

DOCDB simple family (application)

EP 85109569 A 19850730; CS 578185 A 19850808; DE 3429441 A 19840810; DE 3577713 T 19850730; JP 17441685 A 19850809; MX 20624985 A 19850809; US 11791187 A 19871103